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Contax Yashica

Close-Up System

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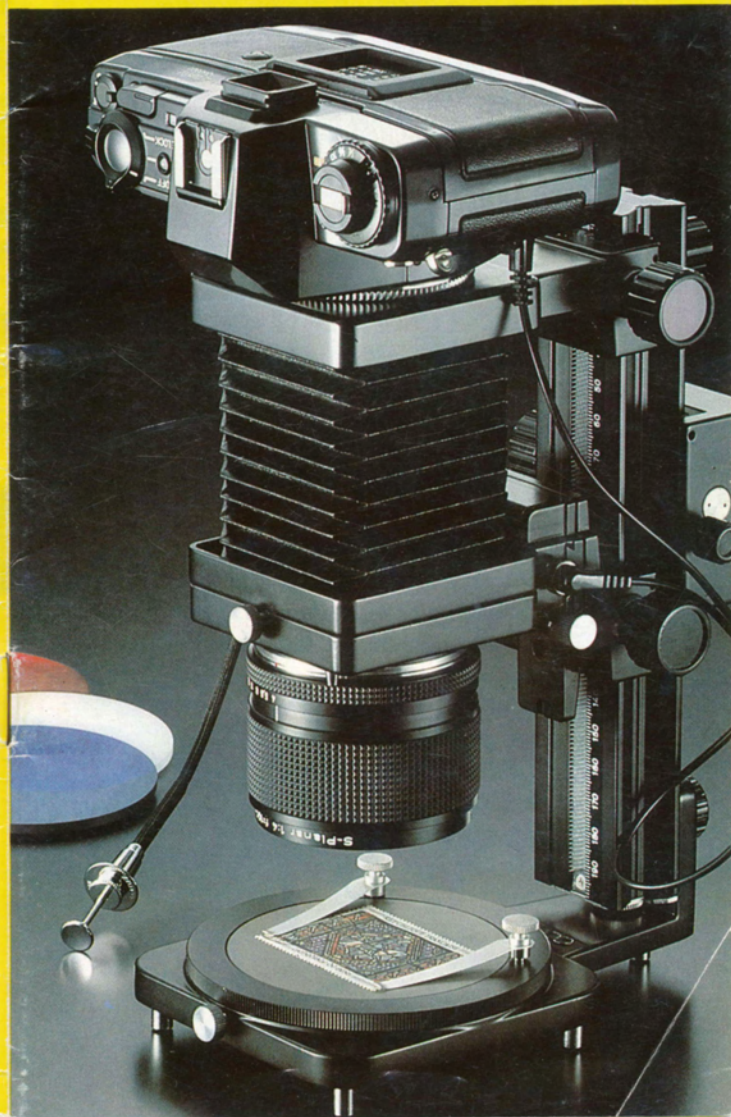
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Explore The Fun & Challenge Of The Micro-World

There's another world to explore photographically—a world of bizarre, fantastic designs, with an infinite range of colors, a world that takes you to the very heart of the photographic challenge. And the Contax/Yashica Close-up/Micro System offers you just the equipment you need to meet every challenge of this micro-world. From equipment that brings you a little more detail, to equipment that takes you all the way to the world of invisible detail, accessories in the Contax and Yashica equipment lines provide everything you need for outstanding photos.

Show one section of a painting in close-up, photograph an ant in life-size reproduction, move all the way into a universe never seen with the naked eye. Contax/Yashica system accessories give the photographer every tool necessary to create stunning beauty or scientifically detailed enlargement.

From simple Close-up Lenses that screw onto the front of your prime lens, to the optically superb Luminar Adapter that links your camera to any microscope; from special Macro Lenses that bring you life-size reproduction, to Bellows/Slide-Copying equipment for larger-than-life photography. And other Contax/Yashica accessories let you simplify, extend range, add data or remotely control your work in the beautiful, startling, elegant world of close-up/macro photography.



Photographed with
S-Planar T* f/2.8 60mm (Macro)
Auto Extension Bellows.



Some Basic Facts About Close-Up Photography

To Select Close-Up Equipment

Selection of close-up equipment sometimes appears to be confusing due to the large quantity available. But this is not the case. All that is needed is a standard to go by. First, determine what sort of close-up photographs to take. This usually narrows the range down considerably. Two things must be considered here: the desired magnification ratios and the distances at which the photographs are to be taken. Once this is known, the selection of equipment becomes extremely simple. Only the minimum amount of equipment should be purchased at first. Later, additions can be made as experience increases and need arises.

For example, for photographs of small objects and details of larger ones, close-up lenses or extension rings may fill the bill perfectly. But larger magnification ratios and closer working distances may require a macro lens or bellows attachment.

Depth-Of-field In Close-Up Photography

The extremely close working distances encountered in close-up photography mean there is very little depth-of-field. While this can be artistically utilized for the isolation of points of interest, it can be overcome when necessary by stopping down the lens to a small aperture.

Magnification Ratio And Working Distance

The two factors of magnification ratio and working distance are inter-related, and are very important in the field of close-up photography. And both are controlled by the minimum focusing distance of the equipment used, as well as by the type of lens. In other words, the same magnification ratio could be obtained at different distances with different equipment.

Changing the magnification ratio, or working distance, makes it possible to produce different effects and different fields of view. What this means can be clearly seen by examining the following photographs, taken of the same coin at different distances and magnification ratios.



Life-Size



1/10X



2X



1/3X



3X



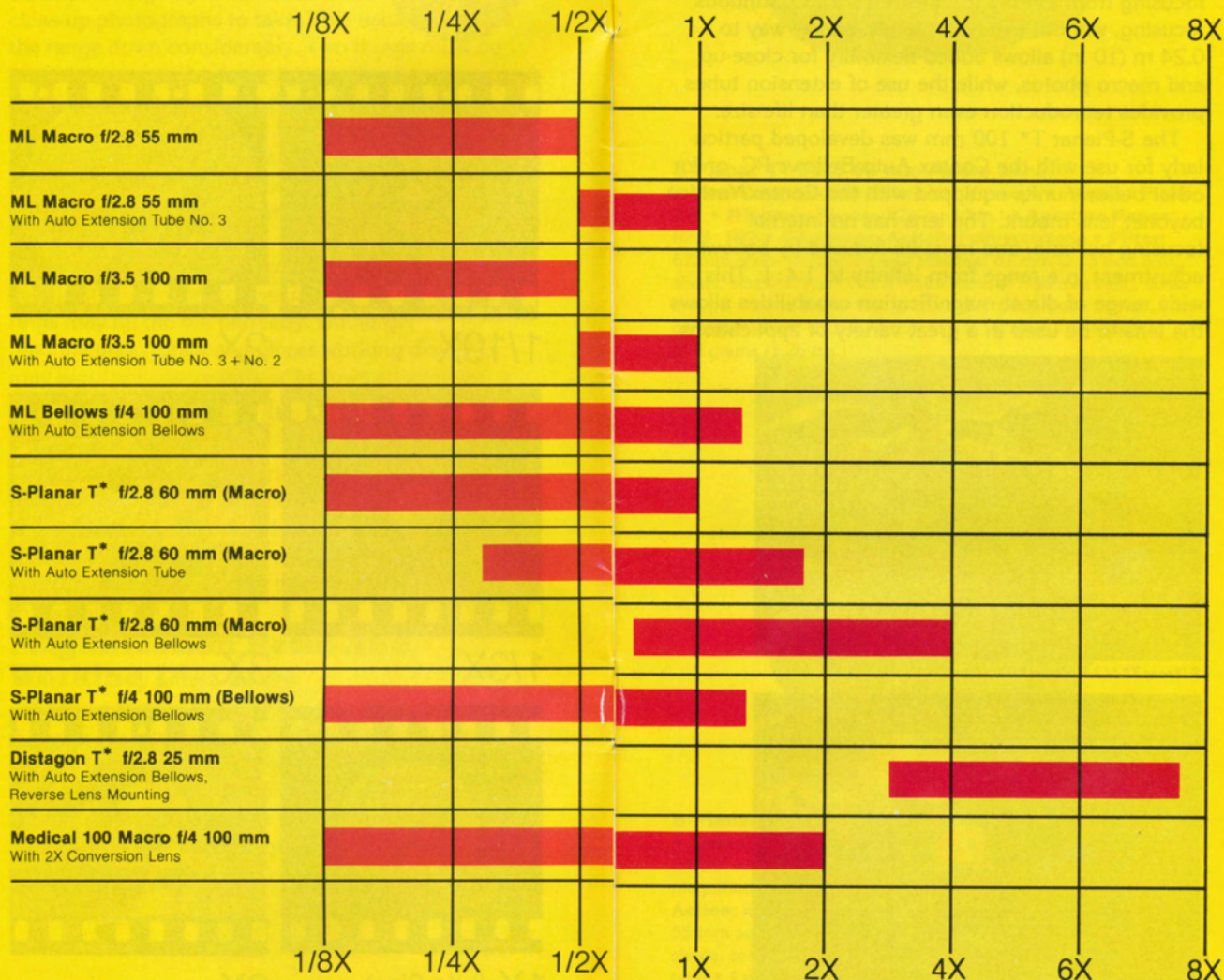
1X (Life-Size)



8X

Magnification Ratios Possible With Carl Zeiss / Yashica Lenses And Accessories

Note: This table shows approximate magnification ratios possible with various lens and accessory combinations, and is intended for use only as a general guide.



Two Superb Optics For Exquisite Results

From Carl Zeiss come two outstanding T* Series Optics that offer the world's finest close-up/macro reproductive capabilities: the S-Planar T* f/2.8 60 mm and the S-Planar T* f/4 100 mm.

The S-Planar 60 mm is a macro lens with helicoid focusing from Infinity to Lifesize (1:1). Continuous focusing, without extension tubes, all the way to 0.24 m (10 in) allows added flexibility for close-up and macro photos, while the use of extension tubes provides reproduction even greater than life-size.

The S-Planar T* 100 mm was developed particularly for use with the Contax Auto Bellows PC, or for other bellows units equipped with the Contax/Yashica bayonet lens mount. The lens has no internal focusing helicoid, and must be focused by bellows adjustment in a range from infinity to 1.4:1. This wide range of direct magnification capabilities allows the lens to be used in a great variety of applications.



S-Planar T* f/2.8 60mm Macro Lens



S-Planar T* f/4 100mm Bellows Lens



S-Planar T* f/2.8 60 mm Macro Lens

- **Lens Composition:** 6 elements, 4 groups • **Angular Field:** 39° • **Minimum Focus:** 0.24 m (10 in.) • **Aperture Range:** f/2.8 - f/22 • **Diaphragm Action:** Fully automatic • **Filter:** 67 mm screw-in type • **Lens Shades:** 67 mm G-13 Soft lens shade, screw-in type; No. 3 Metal Hood (67/86 mm ring), screw-in type • **Lens Case:** No. 2, Leather • **Lens Cap:** 70 mm, clip-on type • **Size:** 75.5 x 74 mm (3 x 2-15/16 in.) • **Weight:** 570 grams (1.26 lbs.)



S-Planar T* f/4 100 mm Bellows Lens

- **Lens Composition:** 6 elements, 4 groups • **Angular Field:** 24°30' w/33° image circle • **Minimum Focus:** 1.4X magnification ratio • **Aperture Range:** f/4 - f/32 • **Diaphragm Action:** Instantaneous stopdown w/connector cord • **Filter:** 55 mm screw-in type • **Lens Shades:** 55 mm G-11 Soft lens shade, screw-in type; No. 5 Metal Hood (55/86 mm ring), screw-in type • **Lens Case:** No. 1, Leather • **Lens Cap:** 59 mm clip-on type • **Size:** 62.5 x 48.5 mm (2-7/16 x 1-15/16 in.) • **Weight:** 285 grams (10.1 ozs.)

Three Versatile Yashica Macro Lenses

Yashica lets you take your choice of macro optics with three excellent selections: the ML f/2.8 55 mm Macro offers half life-size (1:2) focusing for general close-up/macro capabilities; with the ML f/3.5 100 mm Macro you get half life-size (1:2) capability along with a little extra working distance from the subject; and the ML f/4 100 mm Bellows (no helicoid) can be used for subjects at virtually any magnification range when linked to the bellows unit.



ML f/2.8 55mm Macro Lens



ML f/4 100mm Bellows Lens



ML f/3.5 100mm Macro Lens



ML f/2.8 55 mm Macro Lens

- **Lens Composition:** 6 elements in 4 groups • **Angular Field:** 43° • **Minimum Focus:** 0.25 m (10 in.) • **Aperture Range:** f/2.8 - f/22 • **Diaphragm Action:** Fully automatic • **Maximum Magnification:** 1:2 (increased to life-size with 27 mm Auto Extension Tube No. 3) • **Filter:** 52 mm screw-in type • **Lens Shade:** 54 mm slide-on type • **Lens Case:** 70A • **Lens Cap:** 52 mm clip-on type • **Size:** 61.5 x 56.5 mm (2-7/16 x 2-1/4 in.) • **Weight:** 305 grams (10.8 ozs.)



ML f/3.5 100 mm Macro Lens

- **Lens Composition:** 6 elements in 4 groups • **Angular Field:** 24° • **Minimum Focus:** 0.44 m (1.5 ft.) • **Aperture Range:** f/3.5 - f/22 • **Diaphragm Action:** Fully automatic • **Maximum Magnification:** 1:2 [increased to life-size with Auto Extension Tubes No. 2 (20 mm) and 3 (27 mm)] • **Filter:** 55 mm screw-in type • **Lens Shade:** 57 mm slip-in type • **Lens Case:** 70A-2 • **Lens Cap:** 57 mm slip-on type • **Size:** 67 x 77 mm (2-5/8 x 3-1/16 in.) • **Weight:** 430 grams (15.2 ozs.)



ML f/4 100 mm Bellows Lens

- **Lens Composition:** 5 elements in 3 groups • **Angular Field:** 24° • **Minimum Focus:** No focusing helicoid (Max. magnification: M1.4:1) w/Auto Bellows • **Aperture Range:** f/4 - f/32 • **Diaphragm Action:** Instantaneous stop-down • **Filter:** 52 mm screw-in type • **Lens Shade:** 54 mm slip-on type • **Lens Case:** 70A • **Lens Cap:** 52 mm clip-on type • **Size:** 60 x 32 mm (2-3/8 x 1-1/4 in.) • **Weight:** 190 grams (6.7 ozs.)

*For use with bellows only.

Maximum Versatility With Contax Bellows PC

The Contax Auto Extension Bellows PC is the finest precision instrument ever created for 35 mm close-up/macro photography. In addition to allowing simplified reversal of the lens for improved optical results, the Bellows PC unit allows the lens board itself to be shifted 10 mm to the left or right, as well as 360° horizontal swing, for exceptional perspective control. Electromagnetic linkage takes full advantage of the Contax release system, and provides for full-aperture metering and auto stop-down, as well as more precise focusing, since the aperture remains open until the moment of exposure.

The Contax Auto Extension Bellows PC is also fully compatible with a wide range of Contax/Yashica accessories, including such convenient equipment as off-camera control and auto-winding units.

Rotation of the lens board allows reverse mounting of any lens in order to increase magnification ratio and provide even greater clarity and flatness of field.



Butterfly Wing

Auto Bellows PC + ML f/1.4 50mm



2 X Magnification



3.2 X Magnification (reverse-mounting)

Contax Auto Extension Bellows PC Specifications

- **Mount:** Contax/Yashica mount
- **Light reading:** Instant light reading at open aperture
- **Scale readings:** 0 - 200 mm
- **Range of extension:** 45.5 mm + 140 mm (45.5 to 185.5 mm)
- **Lensboard movements:** Horizontal shift up to 10 mm to the right and left; horizontal swing through 360 degrees
- **Depth-of-field preview:** Depth-of-field preview provided through depression of stop-down button on base of lens-board
- **Other features:** Lens reversing feasible without removing the lens or lensboard; accepts Slide Copier
- **Size:** 200 x 120 x 70 mm (7-7/8 x 4-3/4 x 2-3/4 in.)
- **Weight:** 785 grams (1.7 lbs.)

Reverse Lens Mounting

Included with the Bellows PC unit is the special 55 mm Adapter Ring required for reverse-mounting of Carl Zeiss T* lenses. A 52 mm Adapter Ring is also included to allow reverse-mounting of Yashica ML lenses, as well.



Interpretation of the Magnification Tables
Magnification Ratio... Represents the proportional difference in size between the actual image and the film image.

Scale Reading Difference... Represents the value derived from the difference indicated by the lens board and camera board settings relative to the desired magnification ratio. This value is determined by using the rail settings of the "white dot" on front of lens board and the "red dot" on rear of camera board.

Distance... Refers to the film-plane-to-subject distance.

Distances and Magnification Ratios Possible with S-Planar T* f/4 100mm

Magnification Ratio	Scale Reading Difference	Distance
—	60	∞
0.20	80	703mm
0.40	100	473mm
0.60	120	409mm
0.80	140	388mm
1.00	160	383mm
1.20	180	386mm
1.40	200	394mm

Distances and Magnification Ratios Possible with Planar T* f/1.4 50mm

Magnification Ratio	Scale Reading Difference	Distance
0.89	60	198mm
1.00	66	197mm
1.50	91	205mm
2.00	117	223mm
2.50	143	243mm
3.00	169	266mm
3.50	195	289mm
3.75	200	301mm

Contax Focusing Rail

This special accessory item attaches to the base of the Bellows PC unit to allow easier focusing, as well as lateral tracking capability and use of the Macro Stand. It features an extra-large focusing knob that can be locked into position, along with a tripod socket. **Size:** 200 x 34 x 54 mm (7-7/8 x 1-5/16 x 2-1/8 in.) **Weight:** 400 grams (14.1 ozs.)



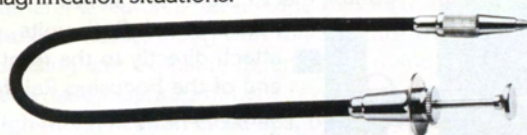
Dedicated Accessory Cords For Bellows PC

For dedicated use with the Bellows PC unit Contax provides special cords: (1) a screw-in terminal connector cord for use with the Contax RTS II Quartz, 137MA Quartz, 139 Quartz and FX-D Quartz cameras; (2) a plug-in connector cord for use with other camera bodies.



Cable Release:

Extremely convenient in close-up/macro photography to eliminate the possibility of camera shake in high magnification situations.



Simplified Slide Copying

Make precise duplications or enjoy the creative fun of varying angle, color tone or reproduction size by using either the Contax Slide Copier or the Yashica Slide Copier together with your bellows unit. Either model allows copying of individual, mounted slides or of filmstrips with the use of an easy clip-on holder/tray unit. The slide copiers attach quickly and easily to the mount on the base of the lens board.



Contax Slide Copier/ Yashica Slide Copier Size:

131 x 97 x 180 mm
 (5-3/16 x 3-13/16 x 7-1/16 in.)
Weight: 374 grams
 (13.2 ozs.)

Slide Copier Position... Value indicated by position of slide copier for the desired magnification ratio, with setting of "red dot" scale mark being used as reference point.

Distances and Magnification Ratios Possible with Planar T* f/1.4 50mm

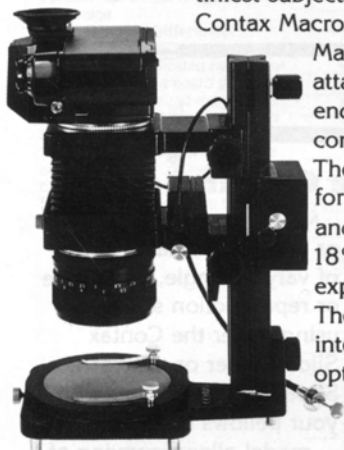
Magnification Ratio	Scale Reading Difference	Slide Copier Position	Distance
0.89	60	47	197mm
1.00	66	41	197mm
1.20	76	32	198mm
1.40	86	26	203mm
1.60	97	21	208mm
1.80	107	18	215mm
2.00	117	15	223mm
2.20	128	13	231mm
2.25	130	12	232mm



Precision Copying Equipment

For precise copying of even the tiniest subjects use the convenient Contax Macro Stand or Yashica

Macro Stand. Both units attach directly to the front end of the Focusing Rail for convenient operation. The stages feature clamps for holding small specimens, and a standard glass with 18% reflectance for easy exposure determination. The standard glass is interchangeable with optional colored stage glasses.



Interchangeable Stage Glasses: available in transparent, milky, red, orange, green & blue.

Contax Macro Stand/Yashica Macro Stand Size:

47 x 157 x 100 mm (1-7/8 x 6-3/16 x 3-15/16 in.)

Weight: 265 grams (9.3 ozs.)

Distances and Magnification Ratios Possible with Planar $f/1.4$ 50mm

Magnification Ratio	Lens Position	Camera Position	Distance
0.89	111	51	198mm
1.00	117	52	197mm
1.50	135	43	205mm
2.00	143	26	223mm
2.50	148	5	243mm
2.62	149	0	249mm

Lens Position... Value indicated by lens board setting for the desired magnification ratio, with setting of front "white dot" being used as reference point.
Camera Position... Value indicated by camera board setting for the desired magnification ratio, with setting of rear "red dot" being used as reference point.



Auto Extension Bellows F2

The Yashica Auto Extension Bellows F2 is the perfect match for the advanced Yashica FX-D Quartz camera. It features full linkage for electromagnetic shutter release, along with full-aperture viewing, focusing and exposure determination and an fully-automatic diaphragm. Lens reversal is simple for high-magnification close-ups, by lifting the lens board from the track and setting it reverse position. Rotating camera mount allows flexible composition, and the bellows unit incorporates special depth-of-field preview and lens release buttons

for more convenient operation. Included with the Bellows F2 is its own Shutter Connector Cord and Cable Release for linkage with the electromagnetic release system of the camera.

(The Yashica Focusing Rail can be used for easier focusing, lateral tracking and Macro Stand use.)



Size: 200 x 120 x 70 mm (7-7/8 x 4-3/4 x 2-3/4 in.)

Weight: 660 grams (1.46 lbs.)

Auto Extension Bellows F

The Yashica Auto Extension Bellows F is the perfect match for the action-oriented Yashica FX-3 or FX-7 camera bodies. It incorporates identical features with the Bellows F2 unit, but employs a special Double Cable Release unit (supplied with the Bellows F) for mechanical linkage to the shutter release system. (The Yashica Focusing Rail can be used for easier focusing, lateral tracking and Macro Stand use.)

Size: 200 x 120 x 70 mm (7-7/8 x 4-3/4 x 2-3/4 in.)

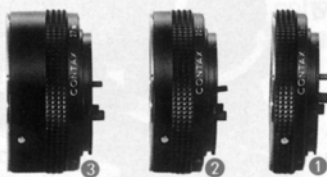
Weight: 660 grams (1.46 lbs.)



Contax Auto Extension Tube Set

For convenient portable close-up capability, Contax offers this set of three auto extension tubes which provide varying degrees of magnification depending on lens/tube combination. The tubes include No. 1 (13 mm), No. 2 (20 mm) and No. 3 (27 mm). Each is equipped with full linkage for open-aperture viewing, focusing and exposure metering, with auto stop-down of diaphragm. Maximum magnification (with the T* f/1.4 50 mm) is 1.3X.

[Note: combining the S-Planar T* f/2.8 60 mm lens and the tube set (Nos. 1/2/3) provides a precise 2X magnification.]



- 1 No. 1
- 2 No. 2
- 3 No. 3

Mount: Contax/Yashica 3-claw bayonet

Lens Release: individual buttons on each tube

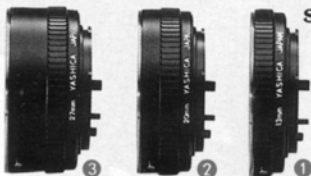
Weight: No. 1 55 grams (1.9 ozs.) No. 2 85 grams (3 ozs.) No. 3 110 grams (3.9 ozs.)

Set: 250 grams (8.8 ozs.)

Yashica Auto Extension Tube Set F

Yashica Auto Extension Tubes also provide close-up capability you can carry easily in pocket or camera bag. They are identical in size to the Contax set, (No. 1 = 13 mm, No. 2 = 20 mm, No. 3 = 27 mm) and provide similar magnification ratios. Either set of Auto Extension Tubes is fully compatible with either the Zeiss T* or Yashica ML lens lines. Yashica Auto Extension Tubes also offer fully open-aperture viewing, focusing and exposure metering, with auto stop down.

[Note: combining the ML f/2.8 55 mm Macro lens and the No. 3 tube provides a perfect life-size 1:1 magnification ratio.]



Set Weight: 250 grams (8.8 ozs.)

- 1 No. 1
- 2 No. 2
- 3 No. 3

Mount: Contax/Yashica 3-claw bayonet

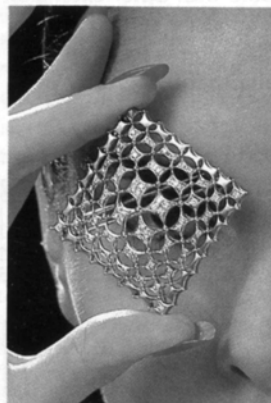
Lens Release: individual button on each tube

Distances and Magnification Ratios Possible with Planar T* f/1.4 50mm

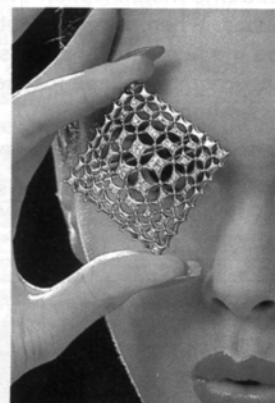
Magnification Ratio	Distance	Combination
0.25	311mm	No.1
0.40	243mm	No.1
0.39	247mm	No.2
0.54	217mm	No.2
0.52	219mm	No.3
0.67	205mm	No.3
0.64	207mm	No.1 + No.2
0.79	200mm	No.1 + No.2
0.77	200mm	No.1 + No.3
0.92	197mm	No.1 + No.3
0.91	197mm	No.2 + No.3
1.06	197mm	No.2 + No.3
1.16	198mm	No.1 + No.2 + No.3
1.31	201mm	No.1 + No.2 + No.3

Interpretation of the Magnification Tables

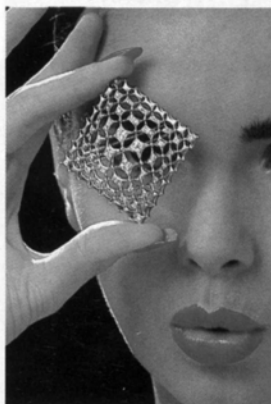
- ☐ At infinity (∞) focus
- ☐ At minimum (0.45 m) focus



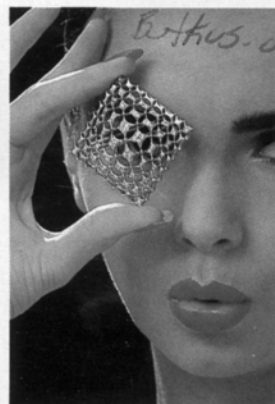
Planar T* f/1.4 85mm + No. 1+2+3



Planar T* f/1.4 85mm + No. 2+3



Planar T* f/1.4 85mm + No. 3



Planar T* f/1.4 85mm + No. 2

Contax Extension Tube 7.5 mm

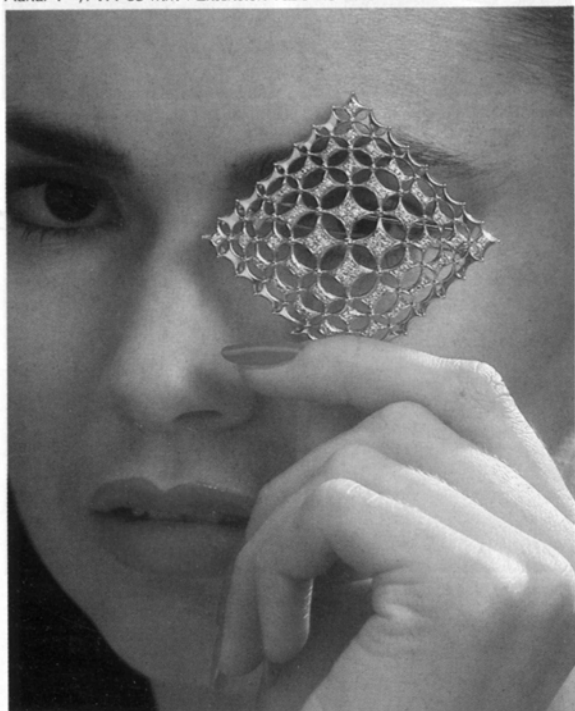


This is a special extension tube made to deliver medium close-up capability with a wide range of lenses. The 7.5 mm ring is especially effective when used with lenses limited in close-focusing capability, to provide a more detailed scene without the extreme magnification available with other extension tubes. When using this tube, aperture settings must be made manually because the tube is too thin to incorporate linkage for the automatic aperture operation.

Distances and Magnification Ratios Possible with Extension Tube 7.5mm

Lenses	Distance Scale (∞)		Distance Scale (Minimum)	
	Distance	Magnification Ratios	Distance	Magnification Ratios
Planar T* f/1.4 50mm	459mm	0.14	285mm	0.29
Planar T* f/1.4 85mm	1,175mm	0.09	673mm	0.19

Planar T* f/1.4 85 mm + Extension Tube 7.5 mm



Contax Reverse Ring



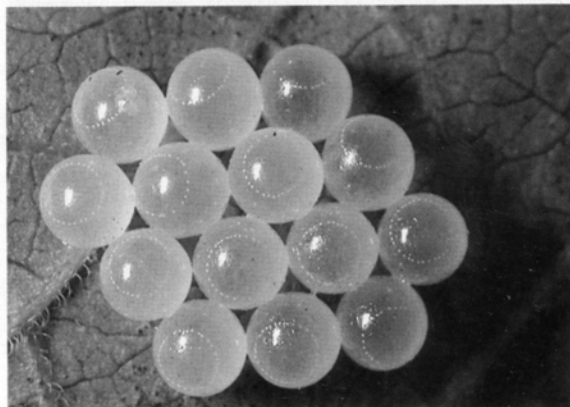
The Contax Reverse Ring is a special accessory allowing any lens with a filter size of 55 mm (or 67 mm when used in combination with the Adapter Ring 67 mm) to be used in reverse position for greater magnification and improved clarity. Lens reversal allows the photographer to obtain high magnifications without any other equipment, especially with wide-angle lenses. With the Reverse Ring, lenses can be mounted in reverse position directly to the camera body, or in combination with extension tubes and/or bellows.

[Note: Reverse-mounting of lenses does not require this ring for Contax/Yashica bellows units.]

When using Reverse Ring, lens diaphragm operation must be performed manually, and focusing helicoid cannot be used.]

Distances and Magnification Ratios Possible with Distagon T* f/2.8 35mm

Magnification Ratio	Distance	Combination
1.49	165mm	—
1.70	170mm	Ext. tube 7.5mm
1.85	173mm	No.1
2.05	178mm	No.2
2.24	184mm	No.3
2.41	189mm	No.1 + No.2
2.61	195mm	No.1 + No.3
2.80	201mm	No.2 + No.3
3.16	212mm	No.1 + No.2 + No.3



Distagon T* f/2.8 35mm + Reverse Ring + Auto Extension Tube No. 3

Contax Adapter Ring 67 mm



While the primary use of this accessory is to mount the S-Planar T* f/2.8 60 mm lens to the Contax Slide Copier, it is also useful for a wide variety of applications, to link lenses with a 67 mm filter size to 55 mm accessories. Any lens of 67 mm filter size, for example, can be used in reverse position by combining the Adapter Ring 67 mm with the Contax Reverse Ring.

[Note: a separate version of this accessory is available to connect with 52 mm filter size Yashica ML lenses.]

① Distances and Magnification Ratios Possible with Distagon T* f/1.4 35mm

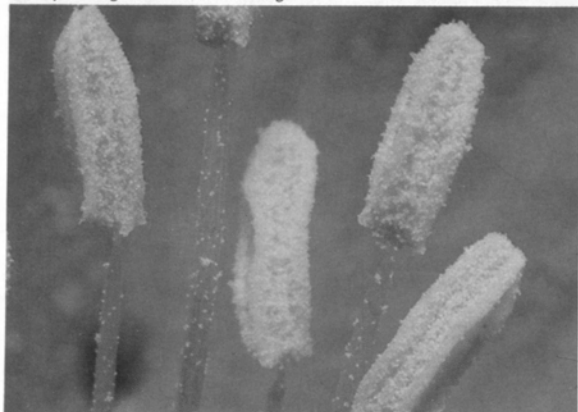
Magnification Ratio	Scale Reading Difference	Distance
2.76	170	219mm
3.00	178	226mm
3.50	197	243mm
3.60	200	246mm

② Distances and Magnification Ratios Possible with S-Planar T* f/2.8 60mm

Magnification Ratio	Scale Reading Difference	Slide Copier Position	Distance
0.75	60	94	243mm
0.80	63	88	241mm
1.00	76	73	238mm
1.20	88	63	240mm
1.40	100	55	245mm
1.60	113	50	252mm
1.75	122	47	258mm

- ① Reverse lens with Auto Bellows PC
- ② Slide Copier

Distagon T* f/1.4 35mm + Auto Bellows PC + Adapter Ring 67mm + Reverse Ring



Contax Luminar Adapter

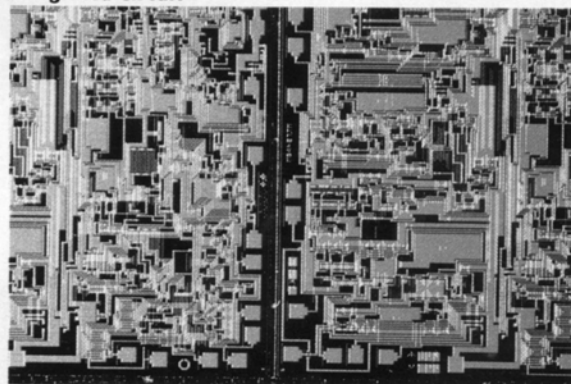


Extreme magnification ratios up to 14X life-size are possible using the Luminar Adapter to link either the Contax Auto Extension Bellows PC or Contax Auto Extension Tubes with any of the four Zeiss Luminar Lenses (or other microscope objectives). The Luminar Adapter allows magnification in four steps (with Luminar Lenses) to achieve coverage of the wide range between ordinary macro photography and photomicrography. Magnification ratio varies according to the focal length of the Luminar Lens or other microscope lens used.

Magnification Ratios with Zeiss Luminar Lenses:

Zeiss Luminar f/2.5 16 mm.....	7.8X - 14X
Zeiss Luminar f/3.5 25 mm.....	3.8X - 7.8X
Zeiss Luminar F/4 40 mm.....	1.75X - 4.2X
Zeiss Luminar f/4.5 63 mm.....	0.99X - 2.5X

Integrated Circuit



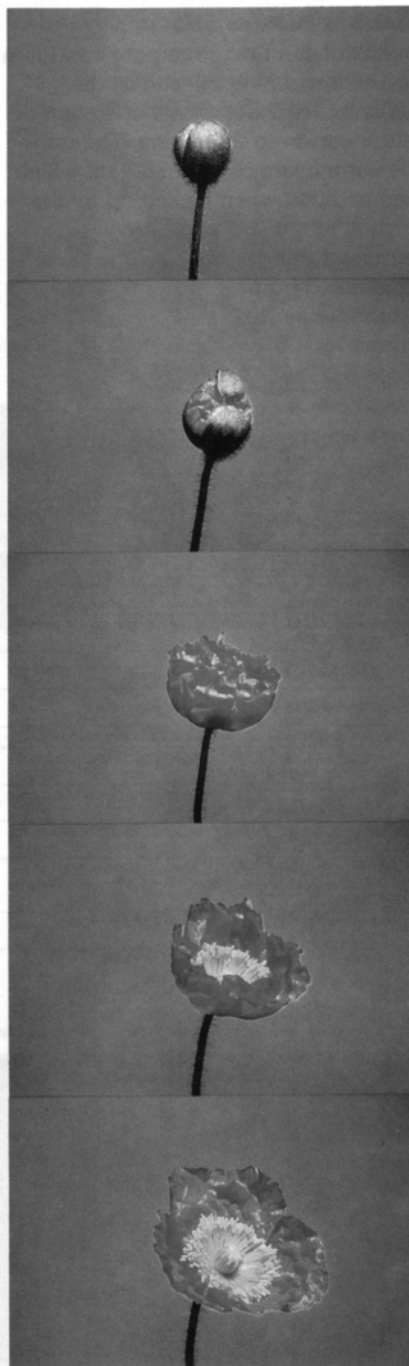
Auto Bellows PC + Zeiss Luminar f/3.5 25mm (4.48 X Magnification)

Automated Remote Control For Close-Up / Macro Use

Auto Winding System

Contax/Yashica auto winding equipment is a definite advantage for all kinds of close-up/macro photography, making release smoother and steadier and providing continuous remote control capability in conjunction with off-camera control units.

The Contax 139 Winder II and Yashica FX Winder offer two frames-per-second capability with either the Contax 139 Quartz or Yashica FX-D Quartz, while the RTS II Quartz employs the Real Time Winder W-3 (3 fps.) (or Professional Motor Drive W-6: 5 fps.). Of course, the built-in micro motor of the Contax 137 MA Quartz provides complete film-drive automation (3 fps.).



Remote Control with Auto Winding + AC Control Box

Infrared Controller S Set

A perfect tool for medium range remote control in specialized close-up or macro applications, the Contax Infrared Controller S Set allows operation of the camera at distances up to 20 meters. The transmitter unit sends out a beam of infrared light which activates camera operation when picked up by the receiver unit.

With this equipment, the photographer can switch from single-frame to continuous operation, and has two-channel control for remote operation of two cameras simultaneously or individually.



Cotnax Infrared Controller S Set Specifications

Type	Infrared control remote shutter release system
Range	Approx. 20 meters (max.)
Number of Channels	2 (enabling simultaneous or alternate operation of multiple camera/winder units with additional receivers).
Operating Modes	C (Continuous) for sequential photography S for single-frame shooting.
Transmitter Battery Life	Approx. 3,000 firings
Transmitter Recycling Time	Approx. 0.4 sec. with fresh alkaline batteries.
Receiver Battery Life	10. hrs. of continuous operation: 30 hours stand-by.
Angle of Coverage	Receiver unit (60° angle of reception). Transmitter unit (45° Beam spread).
Power Source	Transmitter (one 1.5 V penlight battery). Receiver (one 006P 9 V battery).
Accessories	Connector Cord B30R. Connector Cord B30S. cases for transmitter and receiver.
Dimensions	Transmitter — 23.5 x 35 x 120 mm (15/16 x 1-3/8 x 4-3/4 in.). Receiver — 38.5 x 51 x 61.5 mm (2-1/8 x 2 x 2-7/16 in.).
Weight	Transmitter — 70 g (2.4 ozs.) w/o battery. Receiver — 65 g (2.3 ozs.) w/o battery.

Remote Macro Photography With Auto Bellows PC + Infrared Controller S Set



Radio Controller Set

For long-range remote operation (at distances up to 300 meters) the photographer can employ the Contax Radio Controller Set, a wireless transmitter/

receiver set which features two channel/three mode operation for control of multiple camera units individually or simultaneously.

The receiver unit clips quickly and easily into the accessory shoe of the camera, and has a color-coded (blue/silver) switch for channel connection. The transmitter can be set in three modes (blue, silver, blue/silver) for flexible control of remote coverage.

(Unavailable in U.S.A.)

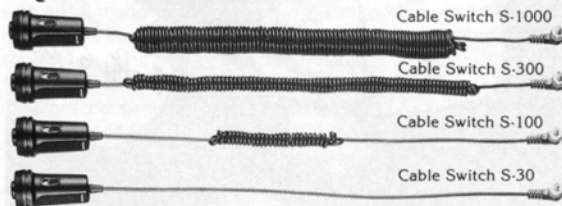


Contax Radio Controller Set Specifications

Transmission Frequency	40.68 MHz FM (Quartz stabilized)
Modulation Frequency	Signal variation of 2600 Hz and 2900 Hz for channel control
Control Switches	Receiver — Power switch Transmitter — 3-way channel selector, power switch
Power Source	Receiver — One 9 V drycell battery (006P) Transmitter — One 9 V drycell battery (006P)
Size	Receiver — 113 x 24 x 64 mm Transmitter — 35 x 24 x 180 mm
Weight	Receiver — 180 grams (6.3 ozs.) Transmitter — 140 grams (4.9 ozs.)

Contax Cable Switch S

In place of the mechanical cable releases employed for most 35 mm SLR cameras, Contax/Yashica system cameras employ the Contax Cable Switch S (which comes in four lengths) for use with the electromagnetic shutter release system. These special Cable Switches allow the photographer to move away from the camera and still retain absolute control over shutter release. The switches come in lengths on 30 cm, 1 m, 3 m and 10 m.



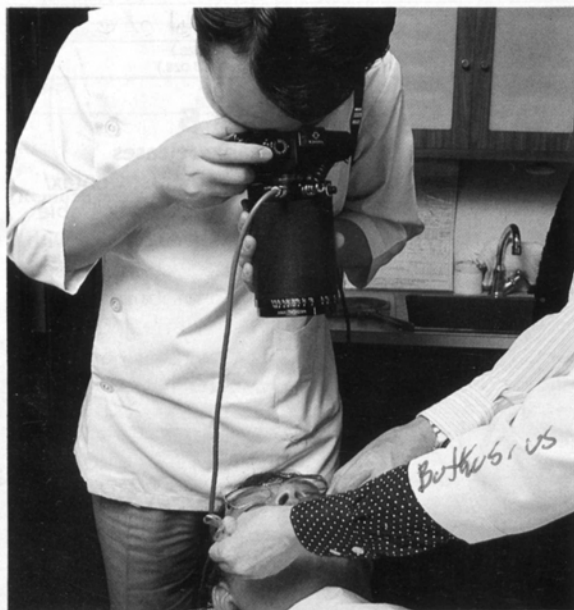
Yashica Medical 100 DX Macrophoto System

The Yashica Medical 100 DX System, centering around the Medical 100 Lens, is a precision optical system designed to provide perfect reproduction of medical, dental and other scientific subjects.

Designed as a comprehensive, self-contained system, the Medical 100 features an integral ringflash unit with external power supply; and comes complete with all required equipment, ready for use in a portable carrying case.

One of the unique features of the system is continuously variable focusing between magnification ratios of 1:15 to 1:1, allowing selection of the exact magnification ratio suited to the subject being photographed. The 100 mm effective focal length of the lens allows ample working distance between the subject and the camera so as to not interfere with continuing medical/scientific work.

The integral ringflash unit eliminates shadows and has a natural color balance. And the diaphragm is linked to the focusing system for correct exposure at all magnifications. A modeling lamp is also built into the ringflash for use in focusing.



The Medical 100 set includes the Medical 100 lens with built-in ringflash unit, DC Pack (portable power source for the ringflash powered by six AA-size penlight batteries), Synch Cord, spare modeling lamp and carrying case. Basic systems accessories include the Reflector Set, a 2X conversion lens, and the Foot Switch; other handy Yashica/Contax accessories for use with the system are the Real Time Winder, 139 Winder II, FX Winder, Data Back Quartz D-4, Data Back Quartz D-5, Data Back Quartz D-6, Radio Controller Set and Infrared Controller S Set.



RTS II Quartz body with the Medical 100 lens, winder and DC power pack.

Lens

- **Focal Length:** 100 mm
- **Lens Composition:** 5 elements in 3 groups
- **Angular Field:** 24°
- **Aperture Range:** f/4 - f/22 (coupled to magnification ratio)
- **Distance Scale:** Indicated by magnifications
- **Magnification Scale:** 1/1-1/1.2-2/3-1/1.8-1/2.5-1/3-1/3.5-1/4-1/5-1/6-1/8-1/10-1/12-1/15
- **Picture-Taking Area:** 24 x 36 mm - 360 x 540 mm (down to 12 x 18 mm with 2X Lens)
- **Working Distance:** 14.7 - 150 cm (from lens front)
- **Filter Size:** 35.5 mm screw-in type
- **Hood Attachment Size:** 90 mm
- **Dimensions & Weight:** 94.5 mm x 155.5 mm (3-3/4 x 6-1/8 in.), 1000 grams (2.2 lbs.)

Flash

- **Light Source:** Ring-shaped xenon discharge tube with Fresnel lens cover
- **Maximum output:** Approx. 23 W, equivalent to Guide Number 6.5 (ASA 100/meters)
- **Flash Duration:** 1/1500 sec
- **Recycling Time:** Approx. 1.5 sec with NiCd batteries, 2.5 sec with alkali-manganese batteries or AC current, 3 sec with manganese batteries (for ASA 100 film; higher film speed for shorter recycling time)
- **Power Sources:** DC Power Pack (9 v); powered by 12 alkaline, manganese or NiCd batteries
- **Number of Flashes:** Approx. 550 (alkali-manganese batteries) Approx. 250 (manganese batteries) Approx. 120 (NiCd batteries)
- **Film Speed Range:** ASA 25 - 400 with 1/3 intermediate steps
- **Modeling Lamp:** 6 V 3 W, interchangeable

Optional Accessories Reflector Set

A special Reflector Set, developed exclusively for use with the Medical 100, which totally eliminates glare and mirror-images from highly reflective subjects. Provides perfect illumination of any subject while preventing crucial areas from reflecting the brightness of the ringflash. The set consists of two chrome-coated cone reflectors which attach to the Medical 100 Lens, and a third disposable reflector which folds in a circle around the subject to disperse light; 4-extra disposable reflectors are included along with an adapter ring for mounting the larger cone reflector when the lens barrel is extended.



Medical 100 with Reflector Set (magnification approx. M 1 : 3.5)



For Dental Photography (magnification M 1 : 2)
Quartz Data Back D-4 (Count Mode)

2X Conversion Lens



A conversion lens which mounts to the rim of the Medical 100 Lens to double the magnification ratio of the master lens.

- **Size:** 37 x 31 mm (1-7/16 x 1-1/4 in.)
- **Weight:** 31 g (1.1 ozs.)



Life Size



2X Conversion Lens

Foot Switch

The Foot Switch is used for convenient switching on and off of the ringflash of the Medical 100 Lens when both hands are busy with other operations. It saves valuable time and eliminates fumbling during complicated medical/scientific work.

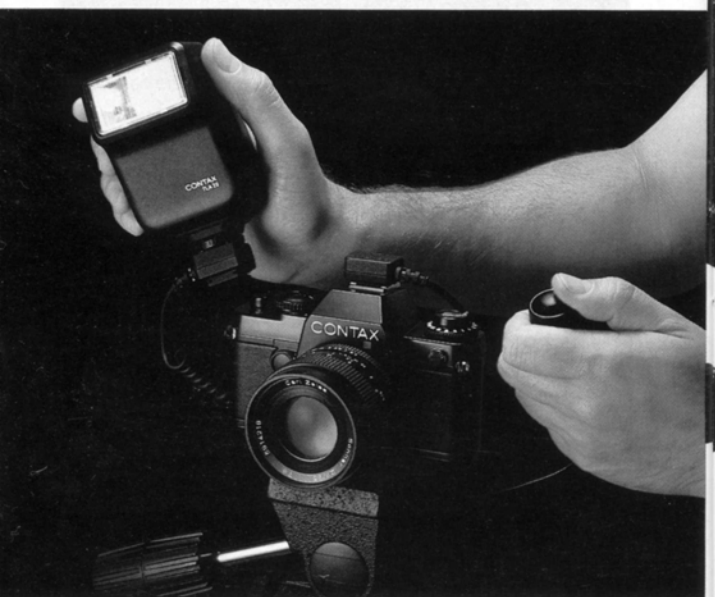
- **Size:** 80 x 82 x 30 mm (3-1/8 x 3-1/4 x 1-3/16 in.)
- **Weight:** 220 g (7.7 ozs.)



Contax TLA Electronic Flash System For Exquisite Results In Close-Up/ Macro Lighting

Contax TLA Flash System

The most fully-automated and convenient flash system ever devised, the Contax TLA Electronic Flash System provides absolutely accurate results with every shot, no matter how difficult the exposure conditions. And, the TLA System also ends flash/shutter synchronization trouble, thanks to its unique 'Fail-Safe' system that automatically controls the camera shutter speed to insure flash synch when the TLA unit is active, or revert to proper AE speed when the unit is recharging. On or off-camera, TLA System flash units provide perfect results with every shot, because the flash exposure is determined Through-The-Lens, by a special SPD (Silicon Photo Diode) in the body of the Contax RTS II Quartz, 137 MA Quartz or 139 Quartz cameras. [For the Yashica FX-D Quartz, the CS 201 Auto and TLA-30 provide 'Fail-Safe' flash/shutter synch and accurate metering through flash unit sensor.]

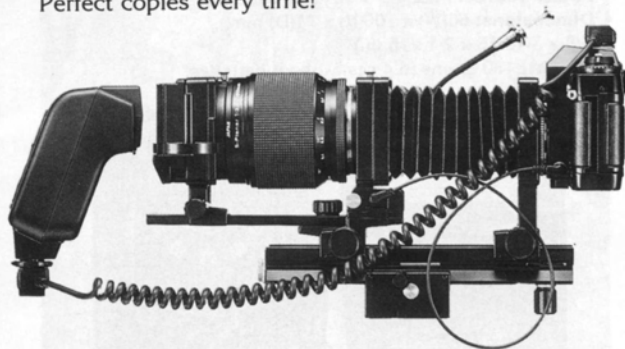


Especially Convenient For Macro

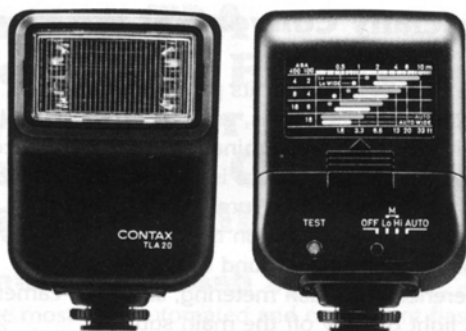
The TLA System is at its peak of efficiency in close-up/macro situations, where the need for ultra-sensitive exposure determination is critical. Since metering of flash exposure is TTL controlled, there's never any need for exposure compensation according to magnification ratio, and there's never any problem of background or surrounding interference with flash metering, since the camera reads light directly off the main subject.

Perfect Slide Copies Every Time

Another unique advantage of the TLA System is that it allows even a beginner to make perfectly exposed slide copies. Just connect camera body, bellows, lens and slide copier, then use a TLA System flash unit for exposure control. The result will be perfect copies, with no build-up of contrast or density, and no question of over or under exposure. Perfect copies every time!

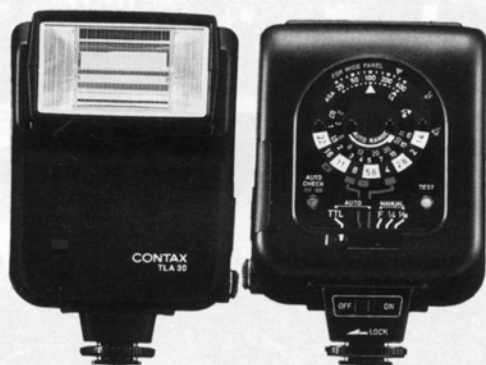


TLA Flash Capability Makes Macro Photo exposure fully automatic, S-Planar T* f/2.8 60mm + TLA30



Contax TLA20

- **Control circuitry:** Thyristorized, energy-saving circuits.
- **Guide number:** Auto: 20 · 4 (ASA 100/meters); manual: **hi:** 20; **lo:** 2.8
- **Flash control:** TTL metering through SPD measuring light at film plane; series control.
- **Recycle time:** 3 · 6 secs., (Fast recycle at **lo** for synch with winder).
- **Coverage angle:** 60° horizontal, 45° vertical (= 35 mm lens); with wide-panel: 76° horizontal, 58° vertical (= 24 mm lens).
- **Power source:** Four 1.5 V AA-size batteries.
- **Dimensions:** 66(W) x 100(H) x 71(D) mm. (2-5/8 x 3-15/16 x 2-13/16 in.)
- **Weight:** 180 grams (6.4 ozs) without batteries.

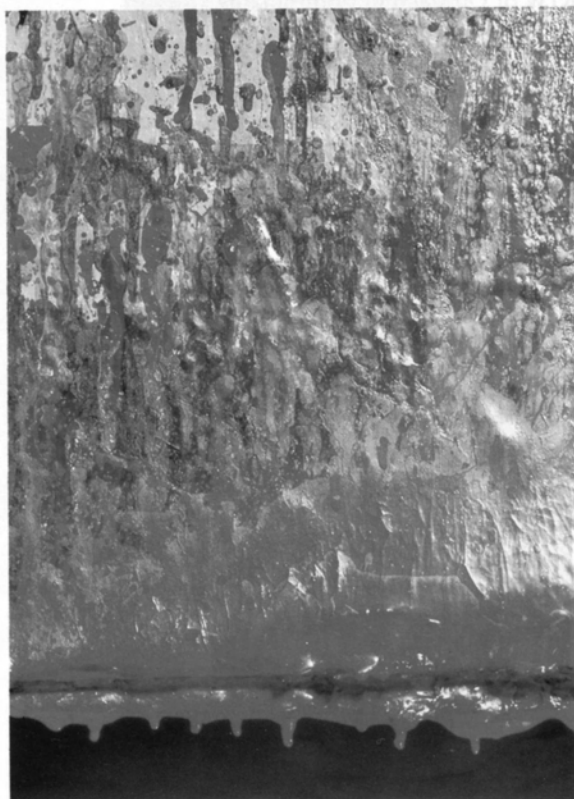


Contax TLA30

- **Control circuitry:** Thyristorized, energy-saving circuits.
- **Guide number:** Auto: GN 30 · 4 (ASA 100/meters); manual: GN 30/15/7.5. (Fast recycle at lower settings for synch with winder.)
- **Flash control:** TTL metering through SPD measuring light at film plane; two-aperture auto control with built-in SPD sensor.
- **Coverage angle:** 60° horizontal, 45° vertical (= 35 mm lens); with special wide panel 76° horizontal, 58° vertical (= 24 mm lens).
- **Bounce flash:** Flash head tilts through vertical angle from -15° to +90° off-center.
- **Power source:** Four 1.5 V AA-size batteries.
- **Dimensions:** 80(W) x 120(H) x 60(D) mm. (3-1/8 x 4-3/4 x 2-1/4 in.)
- **Weight:** 290 grams (10.2 ozs) without batteries.



S-Planar T* f/2.8 60mm + TLA20



ML f/3.5 100mm (Macro) + TLA30

Imprint Dates / Data Directly On Film With Exclusive Contax Data Backs

Data Back Quartz D-4

Designed for exclusive use with the Contax RTS II Quartz, this is a professional-level data back providing cordless operation for dating, timing, data, filing, serial counting and other scientific/documentary purposes. It incorporates its own Quartz clock accurate to within $\pm 15''$ /month, a two-stage ASA adjustment, auto battery ckeck circuit, time check indication and external LCD operation check indication. The back can be used together with other Real Time System accessories, such as the PMD, RTW or Off-Camera Control units.

- **Recordable date:** Year/Month/Day
Day /Hour/Minute (auto via Quartz clock)
Serial Counting (000~399)
Numerical Code Indication (00 00 00 - 99 99 99)
- **Data Location:** Lower right corner of frame
- **Recording Method:** Direct LCD projection onto film
- **Power Source:** Two SR44 or LR44 type batteries
- **ASA Selection:** Two-step adjustment.
- **Operating Checks:** Time check and auto battery/operating check.
- **Size:** 142 x 55 x 23.5 mm (5-9/16 x 2-3/16 x 15/16 in.)
- **Weight:** 100 grams (w/o batteries) (3.6 ozs.)



• Power source: Four 1.5 V AA (R6) alkaline or NiCd 1.2 V AA
• Dimensions: 50 W x 72.0 H x 5.0 D mm
(2 in x 2.8 in x 0.2 in)
• Weight: 100 grams (w/o batteries)

Data Back Quartz D-5

Designed for exclusive use with the Contax 137 MA Quartz, the Data Back Quartz D-5 is identical in features, capabilities and specifications with the Data Back Quartz D-4.

- **Recordable Data:** Year/Month/Day
Day /Hour/Minute (auto via Quartz clock)
Serial Counting (000~399)
Numerical Code Indication (00 00 00 - 99 99 99)
- **Data Location:** Lower right corner of frame
- **Recording Method:** Direct projection onto film
- **Power Source:** Two SR44 or LR44 type batteries
- **Battery Check:** LCD readout when "Time Check" button is pressed
- **Time Check:** Same as above
- **Size:** 146 x 53.5 x 27 mm (5-3/4 x 2-1/8 x 1-1/16 in.)
- **Weight:** 80 g (w/o batteries) (2.8 ozs.)



Data Back Quartz D-6

Designed for exclusive use with the Contax 139 Quartz, the Data Back Quartz D-6 is identical in features, capabilities and specifications with the Data Back Quartz D-4.

- **Recordable Data:** Year/Month/Day
Day /Hour/Minute (auto via Quartz clock)
Serial Counting (000~399)
Numerical Code Indication (00 00 00 - 99 99 99)
- **Data Location:** Lower right corner of frame
- **Recording Method:** Direct projection onto film
- **Power Source:** Two SR44 or LR44 type batteries
- **Battery Check:** LCD readout when "Time Check" button is pressed
- **Time Check:** Same as above
- **Size:** 138 x 53 x 27 mm (5-7/16 x 2-1/16 x 1-1/16 in.)
- **Weight:** 80 g (w/o batteries) (2.8 ozs.)



Accessories For Improved Close-Up / Macro Performance

Contax Right-Angle Finder



This is a freely rotating finder operating at 90° to the optical axis and having a full swing of 360°.

It allows viewing and focusing at any angle of an erect image at 1:1 magnification, a great advantage over similar equipment.

Mounting is over the viewfinder eyepiece and the eyesight has adjustments over a +3 to -5 diopter range.

- **Size:** 80.5 x 32 x 51 mm (3-3/16 x 1-1/4 x 2 in.)
- **Weight:** 105 grams (with eye cup) (3.7 ozs.)

Yashica Right-Angle Finder C



Slides into the grooves on the sides of the viewfinder eyepiece frame and affords viewing erect and correct images at 90 degrees to the optical axis. While mounted in place, it can be rotated through 360 degrees. Individual eyesight adjustment provision featured for ease in viewing and focusing.

An indispensable aid in photomicrography, candid shooting, low-angle photography, etc.

Usable with all Yashica SLR models as well as Contax series bodies.

- **Size:** 80.5 x 32 x 50 mm (3-3/16 x 1-1/4 x 2 in.)
- **Weight:** 105 grams (with eye cup) (3.7 ozs.)

Yashica Magnifier



Slips into the grooves on the sides of the viewfinder eyepiece frame and permits viewing of the center area of the finder field at a ratio of magnification of 2X.

The Magnifier is indispensable in close-up shooting, copying work or other fields of photography where critical focusing constitutes a vital factor.

It can be folded up on hinges to afford full field viewing without removing it from the eyepiece.

- **Size:** 26 x 40 mm (1 x 1-9/16 in.)
- **Weight:** 48 grams (1.7 ozs.)

Eyecup



The eyecup is included with the Contax RTS II Quartz, 137MA Quartz and 139 Quartz bodies, and Yashica SLR camera bodies.

Diopter Lenses

To match individual eyesight to the optical systems of Contax and Yashica cameras, diopter lenses of 8 different strengths are available. The range is from +3 to -5 diopters for perfect matching.

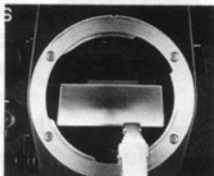


Focusing Flexibility With Interchangeable Screens

Focusing Screens (FS Type) For Contax RTS II Quartz

Because of the increased viewfinder coverage of the new Contax RTS II Quartz camera, a whole new series of Focusing Screens has been developed.

The RTS II Quartz now offers full coverage of 97% of the total frame area, within the viewfinder. This increased coverage required new Focusing Screens, the FS Type, enlarged to dimensions of 37.3 x 25.9mm. The new Focusing Screens for the RTS II Quartz come in eight variations.



FS-1 Microprism Screen:

This is the standard screen provided with the RTS II Quartz body. When the subject is in sharp focus, the image appears crisp and sharp within the center microprism area.

FS-2 45° Split-Image Screen:

This is an extremely handy screen useful for most photo applications. The diagonal split-image focusing aid indicates sharp focus by the aligning of the two halves of the image.

FS-3 Horizontal Split-Image Screen:

Especially convenient for subjects having sharp vertical lines (Horizontal format) or horizontal lines (Vertical format). This screen is widely used, for example, in architectural photography.

FS-4 Split-Image/Microprism Collar Screen:

Combining the advantages of both types of screens, this allows the photographer to employ the split-image focusing aid for subjects with sharp lines, or the microprism collar for general-area focusing sharpness.

FS-5 Matte Screen:

This screen has an overall, uniform matte field that allows critical focusing over wide areas. It is especially useful with certain focal-length lenses.

FS-6 Sectioned Matte Screen:

This screen too has an overall matte field, but also features cross-section horizontal and vertical lines that can be exceptionally useful in checking perspective or proportions, or insuring proper alignment of horizons.

FS-7 Cross-Scale Screen:

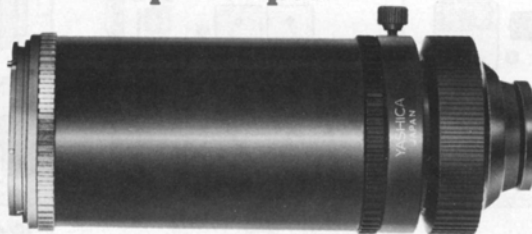
An overall matte field featuring vertical and horizontal cross-scale aids that allow the photographer to make size comparisons, proportional checks, etc.

FS-41 Horizontal Split-Image/Microprism Collar w/Data Position:

This is a new screen specially adapted for use with the RTS II Quartz Data Back. The horizontal split-image and microprism collar focusing aids insure sharpness, while a special section of the screen indicates where data will be imprinted in the frame.

Accessories That Extend Close-up Possibilities

Microscope Adapter F



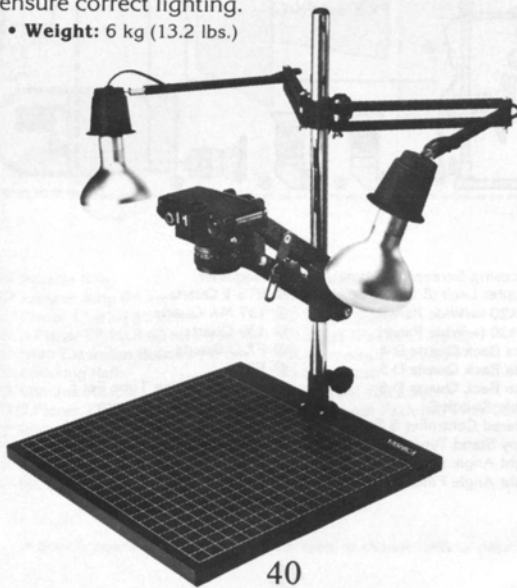
The doors to another new micro-world are opened wide by the Microscope Adapter F. A device which permits Contax and Yashica camera bodies to be mounted on a microscope for ultra high magnification shots.

- **Size:** 52 x 130.5 mm (2-1/16 x 5-1/8 in.)
- **Weight:** 185 grams (6.5 ozs.)

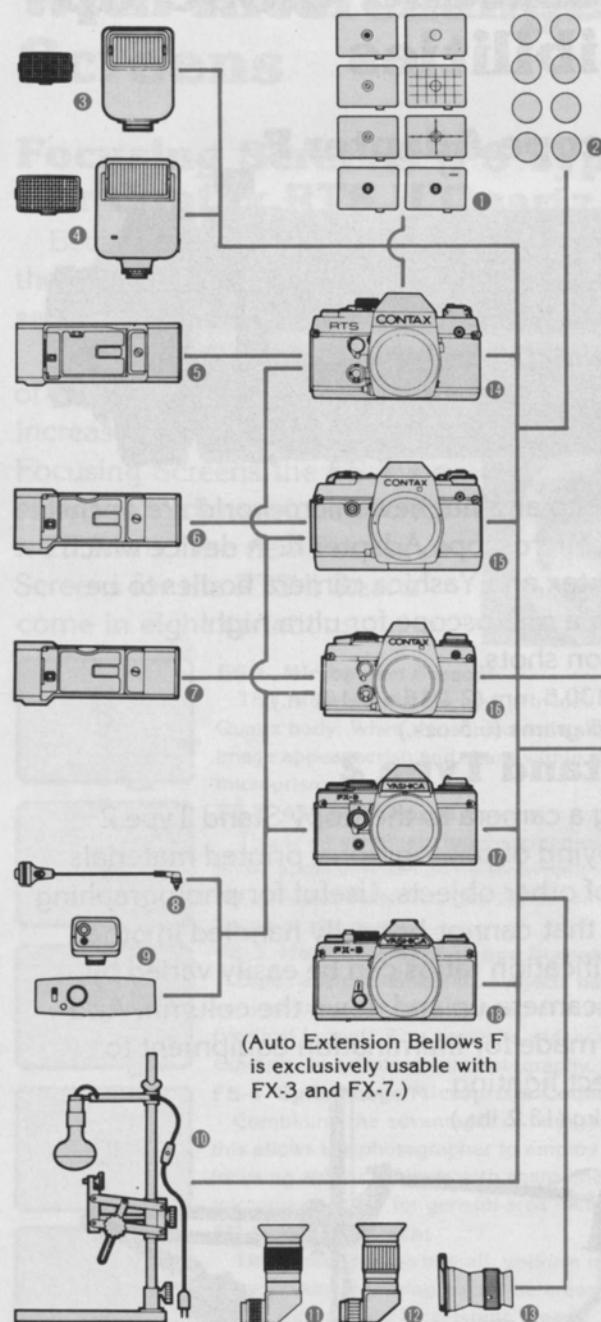
Copy Stand Type 2

Attaching a camera to the Copy Stand Type 2 enables copying of photographs, printed materials and a host of other objects. Useful for photographing small items that cannot be easily handled in other ways. Magnification ratios can be easily varied by moving the camera up and down the column. And provision is made for illumination equipment to ensure correct lighting.

- **Weight:** 6 kg (13.2 lbs.)

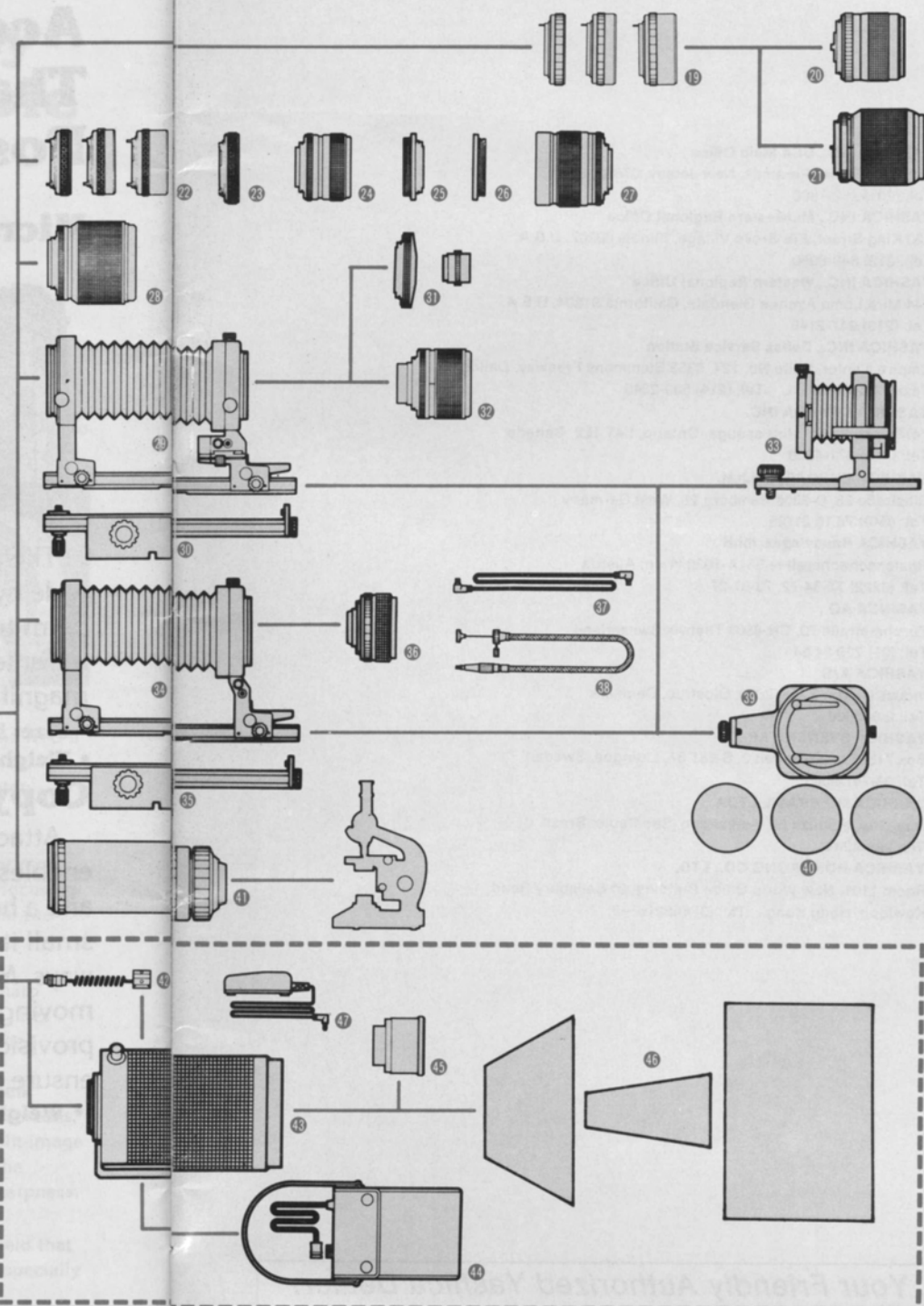


Contax / Yashica Macro / Close-Up System



(Auto Extension Bellows F is exclusively usable with FX-3 and FX-7.)

- ① Focusing Screens (FS-type)
- ② Diopter Lens (8 types)
- ③ TLA20 (w/Wide Panel)
- ④ TLA30 (w/Wide Panel)
- ⑤ Data Back Quartz D-4
- ⑥ Data Back Quartz D-5
- ⑦ Data Back Quartz D-6
- ⑧ Cable Switch S
- ⑨ Infrared Controller S Set
- ⑩ Copy Stand Type II
- ⑪ Right Angle Finder
- ⑫ Right Angle Finder C
- ⑬ Magnifier
- ⑭ RTS II Quartz
- ⑮ 137 MA Quartz
- ⑯ 139 Quartz
- ⑰ FX-D Quartz
- ⑱ FX-3
- ⑲ Auto Extension Tube Set F
- ⑳ ML Macro f/2.8 55 mm
- ㉑ ML Macro f/3.5 100 mm
- ㉒ Auto Extension Tube Set
- ㉓ Extension Tube 7.5 mm
- ㉔ Planar T* 50 mm



- ㉕ Reverse Ring
- ㉖ Adapter Ring 67 mm
- ㉗ Planar T* f/1.4 85 mm
- ㉘ S-Planar T* f/2.8 60 mm (Macro)
- ㉙ Auto Extension Bellows PC Set
- ㉚ Focusing Rail
- ㉛ Luminar Adapter
- ㉜ Slide Copier
- ㉝ Auto Extension Bellows F2
- ㉞ Focusing Rail
- ㉟ ML Bellows f/4 100 mm
- ㊱ Connector Cord
- ㊲ Cable Release
- ㊳ Macro Stand
- ㊴ Stage Glasses (5 types)
- ㊵ Microscope Adapter F
- ㊶ Sync Cord
- ㊷ Medical 100 Lens
- ㊸ DC Power Pack (w/Power Cord)
- ㊹ 2X Lens
- ㊺ Reflector Set
- ㊻ Foot Switch

• Specifications and exterior design subject to change without prior notice.